

State of Utah

DEPARTMENT OF NATURAL RESOURCES

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Executive Director

Division of Oil, Gas and Mining

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Division Director

October 25, 2016

Michael Dalley Staker Parson Companies 89 West 13490 South, Suite 100 Draper, Utah 84020

Subject: Third Review of Notice of Intention to Commence Large Mining Operations, Staker Parson Companies, Heber Binggeli Quarry, M/051/0015, Wasatch County, Utah

Dear Mr. Dalley:

The Division of Oil, Gas and Mining has reviewed the referenced Notice of Intention to Commence Large Mining Operations (Notice) which was received September 27, 2016. The attached comments will need to be addressed before tentative approval may be granted.

The comments are listed under the applicable Minerals Rule heading; please format your response in a similar fashion. Please address only those items requested in the attached technical review by sending replacement pages for the original Notice using redline and strikeout text. After the Notice is determined technically complete, the Division will ask that you submit two clean copies. Upon final approval, both will be stamped approved, and one copy will be returned for your records.

Please submit your response to this review by November 21, 2016.

The Division will suspend further review of the Notice of Intention until your response to this letter is received. Please contact Leslie Heppler, at 801-538-5257 or me at 801-538-5261 if you have questions concerning the review. Thank you for your cooperation in completing this permitting action.

Paul B. Baker

Minerals Program Manager

PBB: lah: eb Attachment: Review

cc: Wasatch County - planning@co.wasatch.ut.us

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THIRD REVIEW OF NOTICEOF INTENTION TO COMMENCE LARGE MINING OPERATIONS

Staker Parson Companies Heber Binggeli Quarry M/051/0015 October 24, 2016

General Comments:

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
1	all	The Division may have additional comments based on the review responses.	lah	

R647-4-104 - Operator Information and Surface and Mineral Ownership

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
2	Page 7	Previous comment - Please add ownership of minerals when the data is completed.	lah	
		New comment – As noted, information and Figure 02A will be forthcoming.		

R647-4-105 - Maps, Drawings & Photographs

105.1 - Topographic base map, boundaries, pre-act disturbance

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
3	Figure 07 and other maps	Figure 07 shows surface drainage. On the south side of Daniel's Creek, all surface drainage flows into ponds 1 and 2 which are outside the permit boundary. Facilities used for the mining operation need to be included within the permit boundary. Please modify Figure 07 and other appropriate maps and text so they include these areas.	pbb	

105.3 - Drawings or Cross Sections (slopes, roads, pads, etc.)

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
4	Figure 10	New comment – Please label cross sections A-A', B-B', C-C' etc.	lah	

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R647-4-106 - Operation Plan

106.5 - Existing soil types, location, amount

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
5	Page 13, Appendix B	Previous Comment: Appendix B has four soil analysis reports, not two. It does not contain a map showing where the samples were taken. Why was only the top six inches analyzed when the survey shows up to 40 inches of soil? Testing should have been done throughout the profile at either 6-inch intervals, or for each soil horizon, if horizons are thin. If, as stated, all available soil will be salvaged, then all should be analyzed to assure suitability or what amendments, fertilizers, etc may be needed to make it suitable. New Comment: The Notice includes a commitment to provide additional soil analyses. Please provide a timeframe as to when this will be submitted. Results of the analyses may require that soil amendments and/or fertilizer be added for reclamation.	lk	

106.7 - Existing vegetation - species and amount

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
6	Page 14 SWCA Report	Previous Comment - The SWCA report (Appendix D) does not contain a comprehensive list of species for each vegetation type; it only lists a few of the very common species. Likewise, this report does not contain data on the percent ground cover of vegetation for each type. This data is needed to fully evaluate reclamation/revegetation plans and establish reclamation standards. If this data is not available, additional vegetation surveys will be required. New Comment – The operator has contacted SWCA to see of the required date is currently available. If not, operator has committed to collect the data in May to June	lk	

106.8 - Depth to groundwater, extent of overburden, geologic setting

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action	
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Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
7	Page 14	Previous Comment - Water well information obtained from the Division of Water Rights logs indicate that groundwater was detected at levels as shallow as 40 feet below ground surface (bgs) (refer to Water Right (WR) No. 55-1216). Most of these wells are concentrated in the valley fill deposits (Qa on the geologic map). An alluvial aquifer appears to exist between 5370 – 5440 above mean sea level. The mine plan states that the final floor elevation will be 5475; therefore groundwater is not expected to be encountered during mining operations. Please update the well log in formation to include the depth to water date from WR 55-1216. New Comment - The operator indicated that Appendix E was updated with the depth to water information from WR 55-1216, but Appendix E was not included with this submittal.	aa	
8	Page 14 Para 3	Previous comment - As written, "ground water is found approx 65-110 feet below ground surface". Please change from "feet below ground surface" to "water elevation varies from * to *." New comment - Please include water elevations. Rewrite to "Water elevation varies from a elevation of 54**feet to 53**feet."	lah	

R647-4-108 - Hole Plugging Requirements

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
9	Page 17 Para 3	Previous comment - As written, "into a producing and/or monitoring well" An artesian monitoring well would be a liability to the surface owner (versus a producing well). Please rewrite the statement to conform with R647-4-108. New comment - Rewrite statement. The surface land owner needs to get the proper documentation from the Utah Division of Water Rights. Until such time as the proper documentation has been received from Water Rights, the operator is bound by the requirements of rule R647.	lah	

R647-4-109 - Impact Assessment

109.1 - Projected impacts to surface & groundwater systems

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
10	Page 18 Para 2	Previous comment - As written, "ground water is found approx 65-110 feet below ground surface". Please change from "feet below ground surface" to "water elevation varies from * to *." New comment – Please include water elevations. Rewrite to "Water elevation varies from a elevation of 54**feet to 53**feet."	lah	

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109.4 - Projected impacts on slope stability, erosion control, air quality, public health and safety

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
11	Page 19	Previous comment - Please include verbiage on how access will be limited to the highwall from the south.	lah	
		New comment – Thank you for including information on signage. Will there be any fencing or berms to restrict access to the highwall from the south?		

R647-4-110 - Reclamation Plan

General comment reclamation plan

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
12	Omission	Previous comment - Figure 09 is a good stand alone figure. The Division including a Figure 09A that would be a reclamation treatments figure. On such a figure, gray out the contours, "turn off" the section lines, and add graphics which show the proposed "reclamation plan." A figure would eliminate detailed verbiage in the text. The figure can be amended or revised in the future, but it would work well for line item bond releases in the future.	lah	
		New comment – On these figures please vary the color of the access roads to remain post reclamation, as the current colors are hard to distinguish from other features on the map.		

R647-4-112 - Variance

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
13		No variance requested; no further action needed	lah	

R647-4-113 - Surety

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
14		Please submit detailed reclamation cost estimates using the Division's bond forms.	whw	
15	Include costs for removal and disposal of 4,000 gallons of diesel fuel and storage tank.		mpb	